



- Miniature PCB power relay
- Up to 16A /277VAC Rating SPST-NO
- Industry standard style
- 105°C Ambient operating temperature



Contacts

Contact arrangement	SPST-NO (1N/O), SPDT (1C/O)	
Contact material	AgSnO ₂	
Max. switching voltage	AC/DC	277VAC / 30VDC
Min. switching current / voltage	1mA/1VDC	
Rated load	AC1	16A, 277VAC
	DC1	16A, 30VDC
Initial resistance	≤50mΩ max. at 0.1A/6VDC	

Coil

Rated voltage	DC	3...48V
Must release voltage	DC	≥ 0.1U _n
Operating range of supply voltage	See table 1	
Rated power consumption	DC	0.54W

Insulation

Insulation resistance	≤ 1000MΩ at 500VDC, 50%RH	
Dielectric strength	coil to contact	5000Vrms, 1min
	contact to contact	1240Vrms (60Hz), 1min

General Data

Operating time (excluding bounce)	typ.	≤ 10ms
Release time (excluding bounce)	typ.	≤ 8ms
Maximum operating frequency	Electrical: 30 ops/min / Mechanical: 300 ops/min	
Electrical life	ops.	≥ 1 x 10 ⁵ , at 105°C (Note 1)
Mechanical life	ops.	≥ 1 x 10 ⁷
Note 1: Electrical life at 105°C, 16A/230VAC Resistive, 5s ON / 5s OFF		

Environmental

Ambient temperature	operating	-40 to 105°C
	storage	-40 to 105°C
Humidity	RH max.	85%
Shock resistance	functional	98.1m/s ²
	destructive	981m/s ²
Vibration resistance	DA 1.5mm 10-55Hz	
Dimensions	L x W x H	29.2 x 12.8 x 20.6mm
Weight	approx.	13g

Ordering Code

D M 4 4 - 3 0 2 1 - 3 5 - 1 0 1 2

Series

Coil code:

See table 1

Contact material

30: AgSnO₂

Contact arrangement

11: SPDT (1C/O)

21: SPST-NO (1N/O)

Environmental protection

3: In cover, sealed - IP67

Mounting & terminations

5: For PCB

Notes:

For AC loads this relay is designed for 50-60Hz standard industrial power and was tested according to AC1 category as defined by the IEC 60947-1 standard, covering low-frequency switchgear (typically 50-60 Hz). Operating at higher frequencies, places the component outside its certified utilisation category, invalidating all safety certifications (CE, UL, etc.) and manufacturer performance guarantees.

DC Coil Data

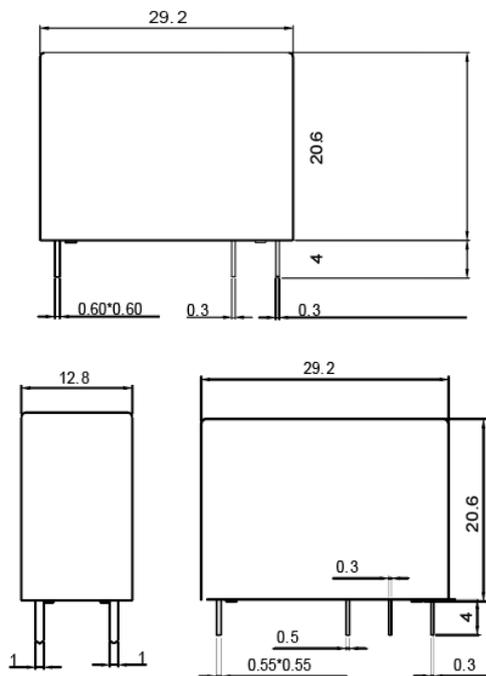
Table 1

Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ±10%	Must operate voltage max. (VDC)	Must release voltage min. (VDC)
1003 ¹	3	17	2.25	0.3
1005	5	47	3.75	0.5
1006	6	68	4.50	0.6
1009	9	150	6.75	0.9
1012	12	270	9.00	1.2
1024	24	1100	18.00	2.4
1048	48	4400	36.00	4.8

¹3VDC Coil not UL approved

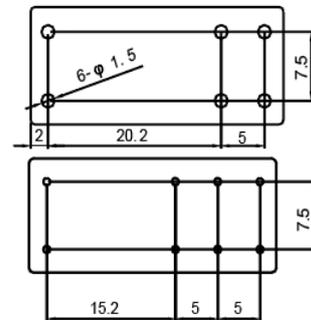
Dimensions mm

Fig. 1



PCB Mounting Dimensions mm (bottom view)

Fig. 2



Wiring Diagrams (bottom view)

Fig. 3

